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10/783,022

02/23/2004

Keiko Shiraishi

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EXAMINER

PAYER, HWEI SIU CHOU

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* KEIKO SHIRAISHI, MITUO ITOH, TOMOTAKA MURASE,  
KENICHI MUTA, MASARU KOBAYASHI, TAKASHI YOSHIDA,  
KOICHI ARISHIMA, and SHIN SUMIDA

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Appeal 2007-2932  
Application 10/783,022  
Technology Center 3700

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Decided: February 26, 2008

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Before TERRY J. OWENS, MURRIEL E. CRAWFORD, and JENNIFER  
D. BAHR, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

Keiko Shiraishi et al. (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1 through 14. We have jurisdiction over this appeal under 35 U.S.C. § 6 (2002).

## THE INVENTION

Appellants' invention is directed towards a device for removing a covering layer of an optical fiber including a receiver body 2 for holding the optical fiber against a limiting body 7, a pusher body 1 for positioning a cutting blade 6 in contact with the covering of the optical fiber 9, a U-shaped leaf spring 3 for connecting the receiver body 2 and the pusher body 1, and a casing 4 (Spec. 4, ll. 24-26; Spec. 5, ll. 31-32; Spec. 6, ll. 7-8; and fig. 1). The cutting blade 6 has a thickness of 0.06-1 mm and is made from a plastic material having a bending elasticity of 900-20,000 MPa (Spec. 5, ll. 1 and 16). In use, the optical fiber 9 is positioned in the receiver body 2 against the limiting body 7, and the user forces the pusher 1 against the elastic force of the spring 3 to place the cutting blade 6 in contact with the covering of the optical fiber 9. Then, the cutting blade 6 cuts into the covering of the optical fiber 9. The optical fiber 9 is then pulled in a longitudinal direction to peel off the covering of the optical fiber, leaving the peeled layer as waste inside the casing 4 (Spec. 7, ll. 12-25).

Claim 1 is illustrative of the claimed invention and reads as follows:

1. A device for removing a covering layer of an optical fiber, the device comprising:

a receiver body for receiving an optical fiber having a covering layer to be removed; and

a cutting blade adaptive to be relatively moved toward said receiver body for cutting the covering layer of the optical fiber, wherein said cutting blade comprises an elastic plastic, said cutting blade has an edge surface substantially perpendicular to side surfaces of the cutting blade, and said receiver body is sized such that when an optical fiber is set on a surface of said receiver body opposite to said cutting blade the length of the optical fiber is longer than the thickness of said cutting blade, and said cutting blade has a bending elasticity in a range of 900 - 20,000 MPa.

#### THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Siden	US 4,059,892	Nov. 29, 1977
Sano	JP 02-142803	Dec. 4, 1990

Appellants seek review of the Examiner's rejections of claims 1-12 under 35 U.S.C. § 103(a) as unpatentable over Siden and claims 1-2 and 13-14 under 35 U.S.C. § 103(a) as unpatentable over Sano. Claim 15 has been withdrawn from consideration pursuant to a restriction requirement mailed March 14, 2006.

The Examiner provides reasoning in support of the rejections in the Examiner's Answer (Ans.) (mailed February 28, 2007).<sup>1</sup> Appellants present opposing arguments in the Appeal Brief (App. Br.) (filed August 23, 2006), the Reply Brief (Reply Br.) (filed January 24, 2007), and the Reply Brief in Response to the Supplemental Examiner's Answer (mailed February 28, 2007), (Supplemental Reply Br.) (filed March 22, 2007).

## OPINION

### *The obviousness rejection based on Siden*

Each of claims 1-12 requires at least one cutting blade having "an edge surface substantially perpendicular to side surfaces of the cutting blade." The Examiner found that Figure 4 of Siden discloses a device for removing the covering layer from an optical conductor (optical fiber) (Ans. 6) including a receiver body 36, a cutting blade 34, and guiding means 15,

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<sup>1</sup> A Supplemental Examiner's Answer was mailed on February 28, 2007. It appears to us that the Supplemental Examiner's Answer is a substantial duplicate of the Examiner's Answer mailed on November 30, 2006. Throughout this decision we will only refer to the Examiner's Answer mailed on February 28, 2007.

16 (Ans. 3). The Examiner further describes the cutting blade 34 as a plastic cutting blade having an “edge” surface received in block 32 that is substantially perpendicular to the side surfaces (Ans. 3).

The crux of Appellants’ argument is that Siden does not teach a cutting blade having an “edge surface substantially perpendicular to side surfaces of the cutting blade” as required in each of claims 1-12 (App. Br. 6-7). It is elementary that to support an obviousness rejection all words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970). The Examiner takes the position that the claim language is broad enough to include the “edge” surface that is received in block 32 (Ans. 3) (the non-cutting edge) as the “edge surface substantially perpendicular to side surfaces of the cutting blade”. As such, the Examiner concludes that Siden discloses a cutting blade having an “edge surface substantially perpendicular to side surfaces of the cutting blade” (Ans. 3).

In response, Appellants argue that the “edge” surface of the blade in the instant claimed invention is the cutting “edge” of the blade because “the term ‘edge’ of a blade in its ordinary meaning [is] the surface of the blade that is used to cut an object” (Br. 7). As evidence, Appellants state that, “[c]ommon dictionaries, such as [Merriam]-Webster’s, [define] an edge as ‘the cutting side of a blade’” (Reply Br. 3 and Supplemental Reply Br. 3). Appellants argue that the cutting blade of Siden tapers to a sharp cutting edge (App. Br. 6, right drawing), whereas the cutting blade of the instant

invention does not taper to a sharp point, but rather has a substantially flat cutting profile (App. Br. 6, left drawing).

We agree with Appellants that that the “edge” surface of the blade in the instant claimed invention is the cutting “edge” of the blade. “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). We also find that the term “edge” means the “cutting side of a blade” (*Merriam Webster’s Collegiate Dictionary* 366 (Tenth Ed. 1997)). Hence, we agree with Appellants that in the context of a cutting blade, the ordinary and customary meaning of an “edge” is the cutting edge of the blade. In conclusion, we find that because the cutting blade of Siden tapers to a sharp edge and because in the context of a cutting blade the ordinary and customary meaning of an “edge” is the cutting edge of the blade, Siden does not disclose a cutting blade having an “edge surface substantially perpendicular to side surfaces of the cutting blade,” as called for in claims 1-12. Accordingly, the rejection is reversed.

*The obviousness rejection based on Sano*

Appellants’ main argument in favor of patentability of claims 1-2 and 13-14 as patentable under 35 U.S.C. § 103(a) over Sano relies on Appellants’ position that Sano does not teach a cutting blade having an “edge” that is substantially perpendicular to the side surfaces of the cutting blade (App. Br.

9-10). This argument is similar to the argument Appellants presented above with respect to the teachings of Siden. Therefore, because we found that in the context of a cutting blade the ordinary and customary meaning of an “edge” is the cutting edge of the blade, we agree with Appellants that Sano does not disclose a cutting blade having an “edge surface substantially perpendicular to side surfaces of the cutting blade.” We therefore reverse the rejection of claims 1-2 and 13-14 as well.

#### SUMMARY

The decision of the Examiner to reject claims 1-14 is reversed.

#### REVERSED

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